APPENDIX E – HARDLINE DEVELOPMENT PROJECTS

The following project descriptions are proposals by the project proponents, current as of February 2009. This project list will be reviewed and revised prior to plan finalization. The development footprints shown here will only authorize take for covered species within their boundaries, they do not confer any other development rights or constitute a preliminary agreement or approval by the County. All projects must comply with all applicable County ordinances and analyze a full range of alternatives under CEQA. Planning of these projects was also coordinated with the County's regulatory process which assures compliance with County ordinances and the CEQA process.

Projects discussed here include:

- Campus Park (GPA 03-004, SPA 03-008, TM 5338)
- Meadowood (GPA 04-02, SP 04-01, TM5354)
- Campus Park West (GPA 05-003, SPA 05-001, VTM 5424)
- Cielo del Norte (GPA 01-02, SP 99-001, TM 5182)
- Merriam Mountains (TM 5381, GPA 04-006)
- Lilac Ranch (GPA 04-008, TM 5385)
- Montecito Ranch (GPA 04-013, TM 5084)
- Paradigm Development (PAA 06-004)
- Warner Ranch (GPA 06-009, SPA 06-002, TM 5508)
- McClellan-Palomar Airport (runway expansion and future industrial development)
- San Marcos Landfill (operations on closed landfill)

The last two projects – San Marcos Landfill and McClellan-Palomar Airport, – are public projects anticipated to occur within the near term. They are included here for analysis purposes and to authorize take of Covered Species Subject to Incidental Take. All projects will comply with CEQA as they are planned in the future.

Campus Park

The 420-acre Campus Park project is located within the Fallbrook Community Plan in the northeast quadrant of the I-15/SR-76 interchange, immediately adjacent to Interstate 15, and between the Campus Park West and Meadowood hardline projects. Major goals for this project include minimization of impacts on sensitive biological resources, floodplains and steep slopes while providing job opportunities, public transportation, public trails and a variety of housing types to help meet the growing population in the North County.

The topography of the property in which the proposed development of Campus Park is planned consists of a long valley rising gently to the east and north. A prominent ridge surrounds the northern portion of the property. Below this ridge is a series of refined slopes and drainages. The property drains to the west and south into Horse Ranch Creek. Grazing is the predominant existing use and various agricultural activities have been conducted on the site over the last several decades.

Biological resources include coastal sage scrub (CSS), annual grassland, southern riparian forest, with smaller amounts of other vegetation types. A riparian woodland occurs in the southern portion of the property supported in part by irrigation runoff from adjacent agricultural activities and from the Pala Mesa golf course. Directed surveys were conducted on the property for the listed California gnatcatcher, least Bell's vireo, arroyo toad and Quino checkerspot butterfly. The California gnatcatcher and least Bell's vireo were found within the project boundaries. Spring surveys for sensitive plants and wetland delineation were also completed. Campus Park has been designed to preserve approximately 67.6 % of the existing natural vegetation.

Campus Park proposes to provide residential, office, and commercial uses. Neighborhood commercial uses are provided for area residents near SR-76 and the center of the project. Homes of various types and densities will be provided along with necessary public facilities, several park sites and trails. Coordination with adjacent projects has ensured the creation of a pedestrian-friendly village with significant recreational opportunities.

Approximately 249.4 acres will be affected by development. Brush management will be performed within the project's development envelope. Campus Park will contribute approximately 166.5 acres of on-site habitat to the North County preserve (Figure 1). Table 1 outlines the impacts and preservation on the site.

Mitigation will consist of on-site dedication of upland and wetland native vegetation per North County Plan (Plan) mitigation ratios. It is likely that some portion of the required mitigation will be located off-site. Off-site mitigation will be located within the Pre-Approved Mitigation Area (PAMA) identified by the Plan, in accordance with the ratios set forth in the Biological Mitigation Ordinance (BMO). This off-site mitigation is estimated to be 148 acres, comprised of approximately 58 acres of riparian forest, 5 acres of riparian scrub, 3 acres of marsh, 2 acres of oak woodland, and 81 acres of non-native grassland/pasture. In addition, the County will ensure that Rice Canyon be incorporated into the North County preserve as a corridor for costal California gnatcatchers.

Campus Park will contribute to the North County preserve through preservation of the large wetland area in the south-central portion of the property and preservation of a large block of

upland vegetation (mostly CSS) in the northern portion of the property. The wetland vegetation provides valuable habitat for many birds and small mammals including the endangered least Bell's vireo, and allows a "stepping stone" connection across SR-76 to the San Luis Rey River. Open space in the northern portion of the site provides habitat for the threatened California gnatcatcher and is part of a larger habitat block that ultimately stretches north towards Rainbow and east to the Pala Native American lands. Additional measures to mitigate indirect project impacts are included in the project EIR.

Uses allowed within the North County preserve areas within Campus Park are limited to the following:

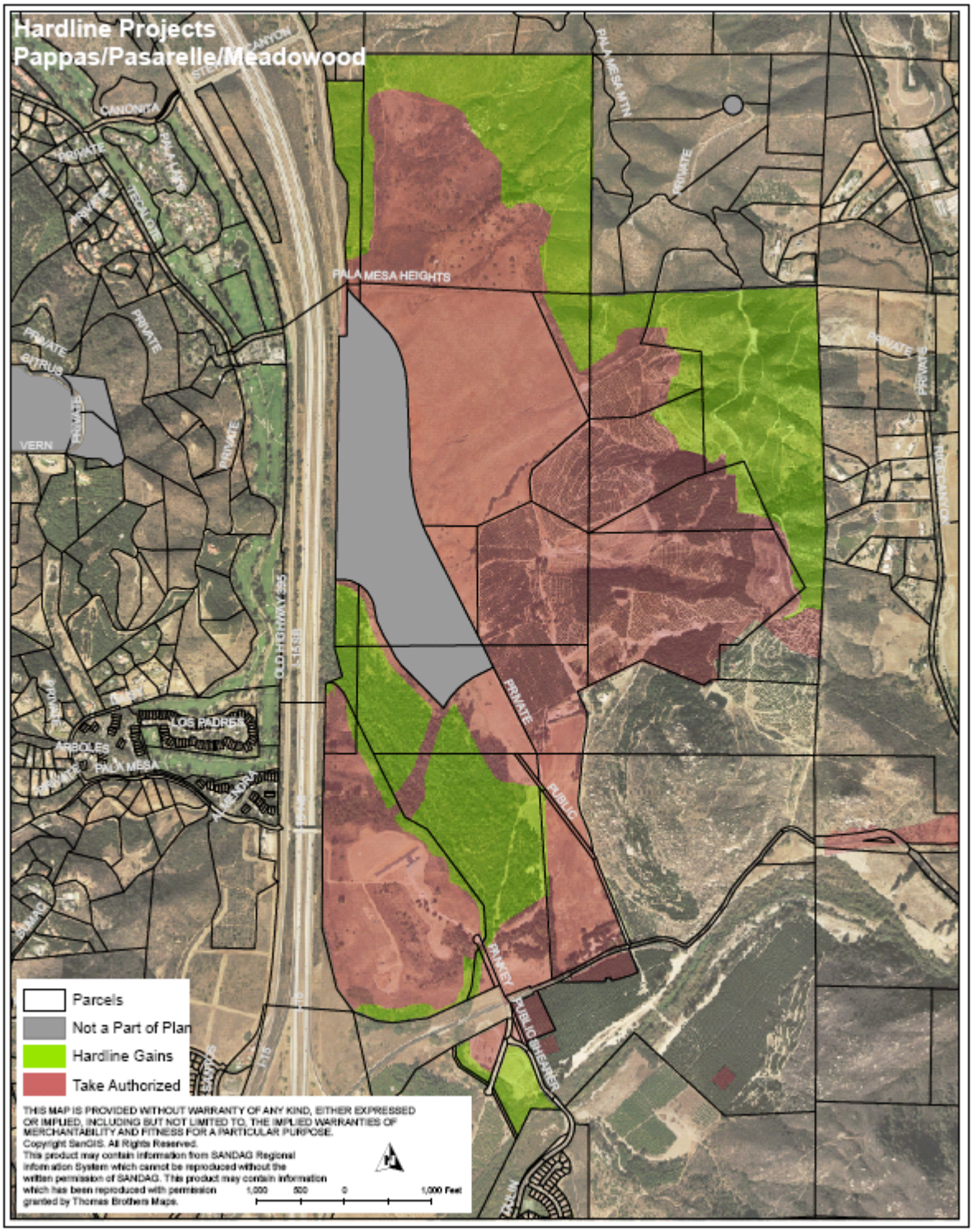
- Revegetation of disturbed areas within the North County preserve as might be undertaken or permitted by state, federal and local agencies in accordance with the Take permit and/or required under separate Army Corps of Engineers 404 permit/Section 7 consultation, 401 Water Quality Control Board Certification and State Department of Fish and Game 1602 Streambed Alteration Agreement.
- Management and maintenance (including construction associated with repair) of public trails. Trails are all located on existing dirt roads.
- Construction and maintenance of the water and sewer lines, roads and other public facilities identified in the project EIR.
- Passive recreational uses including jogging, hiking and bird watching and other uses allowed according to the Framework Resource Management Plan (Appendix G).

Table 1. Summary of vegetation calculations for Campus Park (Pasarelle).

Vegetation community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Coastal Sage Scrub	41.0	0.0	87.1	68.0%
Marsh	0.9	0.0	0.0	0.0%
Non-native Grassland	180.7	0.0	9.5	5.0%
Oak Woodland	1.3	0.0	1.5	53.6%
Riparian Forest	19.2	0.0	66.4	77.6%
Riparian Scrub	1.6	0.0	0.0	0.0%
NATURAL HABITATS SUBTOTAL	*244.7*	*0.0*	*164.5*	*40.2%*
Eucalyptus Woodland	0.2	0.0	0.0	0.0%
Developed/Disturbed Land	4.5	0.0	2.0	30.8%
GRAND TOTAL	***249.4***	***0.0***	***166.5***	***40.0%***

Note: Acreages above include Pankey Road, Campus Parkway and Pala Mesa Drive within the project boundaries. Additional disturbance will be necessary depending upon which public facilities must be built with this project. Coastal sage scrub includes disturbed coastal sage scrub and coyote brush scrub. Numbers have been rounded off to the nearest full acre. Non-native grassland includes mostly land mapped by applicant as "pasture." Off-site mitigation is reported separately in the text description.

Figure 1. Development footprint for Campus Park, Meadowood, and Campus Park West projects.



Campus Park West

The Campus Park West project is located in the southern portion of the Fallbrook Community Plan in the northeast quadrant of the I-15/SR-76 interchange. It is immediately adjacent to both SR-76 and I-15. The property is 118.5 acres in size. Planning goals for this project include the provision of a mix of office, commercial and residential opportunities that will complement each other. A small visitor serving commercial area is proposed south of SR-76. This project is coordinated with the Meadowood and Campus Park projects to create a transit oriented, pedestrian-friendly village, and the provision of adequate and equitably financed public services and facilities. Brush management will be done within the development envelope (Figure 1).

Campus Park West is a gently rolling property with a central mesa that slopes gently to Horse Ranch Creek on the east and SR-76 on the south. A steep-sided, east-west trending drainage separates the northern portion of the property from the remainder. This drainage carries irrigation water from the golf course just west of I-15 under that freeway to Horse Ranch Creek. Horse Ranch Creek crosses the southeast corner of the property.

Biological resources include riparian forest, non-native grassland and small amounts of CSS. Protocol surveys were conducted for the listed coastal California gnatcatcher, Stephens' kangaroo rat and least Bell's vireo. Only least Bell's vireo was located within the project boundaries. Least Bell's vireo was observed on-site in the riparian habitat entering the site from the west and draining to Horse Ranch Creek, and is known to occur in the adjacent riparian area. Protocol surveys were also conducted for the arroyo toad. The arroyo toad was not found on the property nor is there any suitable breeding habitat. Surveys for sensitive plants noted the presence of Palmer's sagewort in the northern portion of the property.

Campus Park West will contribute approximately 20.6 acres of natural vegetation located on-site to the North County preserve (Table 2). The location of the on-site preserve lands are shown in Figure 1.

Mitigation for Campus Park West impacts will include a significant contribution to the North County preserve in three ways:

- Contribution of 25-30 acres of land, consisting of a combination of existing and restored vegetation, for impacts to southern riparian forest, tamarisk and mulefat scrub. Mitigation for impacts to these vegetation types will be 3:1 (Final acreage of restored wetlands will depend on the final project design and on obtaining necessary state and federal permits. Impacts, and corresponding restoration, could be reduced significantly if permits are not granted, and on-site resources are dedicated as open space).
- Contribution of 25-30 acres of land for impacts of various upland vegetation types (e.g., coastal sage scrub, annual grasslands). Mitigation ratios will vary from 0.5 acres to 2.0 acres of open space per acre of impact, as specified in the BMO (Appendix A). (Final mitigation acreage will depend on the final project design)
- Contribution of 18 acres of restored upland aestivation area for arroyo toad. Mitigation ratio will be 3:1 for development of approximately 6-8 acres of non-native grassland located south of SR-76. It is estimated that approximately 6 acres will be located on site on a parcel that bounds the San Luis Rey River.

All mitigation that is not provided on-site will be provided within the PAMA. The arroyo toad mitigation will be located within the San Luis Rey River in the area between the Oceanside City limit and the Pala Casino. Suitability will be determined by a biologist familiar with the needs of the arroyo toad and with expertise in restoring a wide variety of habitat types. Additional mitigation measures related to avoidance of indirect impacts are specified in the project EIR.

Uses allowed within the North County preserve areas within Campus Park West are limited and specific, and consist of the following:

- Revegetation of disturbed areas within the North County preserve as might be undertaken or permitted by state, federal and local agencies in accordance with the Take permit.
- Management and maintenance (including construction associated with repair) of public trails within the open space areas of the project that connect to trails in adjacent projects.
- Construction and maintenance of the water line, roads and other public facilities. The location, impact and mitigation are discussed in the project EIR.

Table 2. Summary of vegetation calculations for Campus Park West.

Vegetation community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Coastal Sage Scrub	3.0	0.0	0.8	21.1%
Non-native Grassland	46.9	0.0	6.3	11.9%
Oak Woodland	0.4	0.0	0.0	0.0%
Riparian Forest	7.4	0.0	11.9	61.7%
Riparian Scrub	3.2	0.0	1.5	31.9%
NATURAL HABITATS SUBTOTAL	*60.9*	*0.0*	*20.5*	*25.2%*
Eucalyptus Woodland	2.0	0.0	0.0	0.0%
Agricultural Land	8.8	0.0	0.1	1.1%
Developed/Disturbed Land	26.3	0.0	0.0	0.0%
GRAND TOTAL	***98.0***	***0.0***	***20.6***	***17.4%***

Notes: Table was prepared by REC based on their biological surveys and site plans provided by the project engineer.
Eucalyptus woodland category also includes other non-native plantings. Off-site mitigation is reported separately in the project description.
These amounts include on-site portions of Circulation Element roads (e.g., Pala Mesa Drive) within the project boundaries. Additional off-site disturbance will be necessary depending upon which public facilities must be built in association with this property.

Meadowood

The Meadowood project is located in the southern portion of the Fallbrook Community Plan in the northeast quadrant of the I-15/SR-76 interchange. The property is 389.5 acres. Major planning goals for this project include the provision of a variety of housing types based on projected needs, integration of the project with others in the area to create a transit oriented, pedestrian-friendly village, retention of a significant amount of existing agricultural uses, and the provision of adequate and equitably financed public services and facilities.

The majority of the site is currently used for agricultural purposes, with natural vegetation located in the northern and eastern portions of the property. Biological resources include CSS and non-native grassland. Directed surveys were conducted for the listed California gnatcatcher and least Bell's vireo, with only the gnatcatcher being found within the project boundaries. Directed surveys and pitfall trap studies were also conducted for the listed arroyo toad. The arroyo toad was not found on the property north of existing SR-76. Rare use of the grove roads south of SR-76 and north of the San Luis Rey River by arroyo toads was noted. No narrow endemics species were located on the property.

A 45.1-acre portion of the existing groves will be retained as part of the community open space. The groves are not part of the North County preserve system. However, groves adjacent to the PAMA will be allowed to continue to operate as an existing use, with coverage dependent on following Best Management Practices outlined in the Plan. These groves serve a beneficial function by separating homes from the natural areas and acts as buffer to possible fires. Brush management will be done within the development envelope shown in Figure 1. Approximately 216 acres will be affected by development. Meadowood will contribute approximately 123 acres on site to the North County preserve (Figure 1). Table 3 shows the amounts of vegetation that will be impacted and preserved within Meadowood.

Table 3. Summary of vegetation calculations for Meadowood.

Vegetation community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	0.2	0.0	19.3	99.0%
Coastal Sage Scrub	11.0	3.2	72.6	83.6%
Non-native Grassland	12.4	2.0	15.8	52.3%
Oak Woodland	0.1	0.0	1.6	94.1%
Open Water	0.7	0.0	0.0	0.0%
Riparian Scrub	0.1	0.0	0.0	0.0%
NATURAL HABITATS SUBTOTAL	*24.5*	*5.2*	*109.3*	*78.6%*
Eucalyptus Woodland	7.9	0.0	0.6	7.1%
Agricultural Land	165.3	45.1	0.0	0.0%
Developed/Disturbed Land	18.4	0.2	13.0	41.1%
GRAND TOTAL	***216.1***	***50.5***	***122.9***	***31.6%***

Notes: These amounts include Meadowood Road and Pankey Road within the project boundaries. Additional disturbance will be necessary depending upon which public facilities must be built with this project. Acreages for coastal sage scrub include disturbed coastal sage scrub. "Developed/Disturbed Land" includes agricultural ponds.

Public Facilities for Campus Park, Campus Park West, and Meadowood Projects

Various offsite facilities will be constructed to provide a necessary and adequate level of public services for the residents of the community located in the vicinity of the intersection of SR-76 and I-15. These include water reservoirs and lines, wastewater treatment facilities and lines, reclaimed water lines, and roads. Schools and parks are not included in this list as they are provided for within the development footprint of hardline projects. The facilities described here are what will be on the ground at buildout. It is likely that each will be constructed in phases, either by segment or by number of lanes. All public facilities associated with development in this area can be expected to be phased in accordance with need as new homes and businesses are built. The "worst case" (largest development footprint) has been used for analysis under this Plan. The conceptual location of these facilities are shown in the project EIR, but should be expected to vary as final engineering designs are completed. It should also be noted that not all facilities are needed by all projects.

Public facilities and road improvement needed for this area include:

- Pankey Road
- Horse Creek Ranch Road (all disturbance is included within a hardline project)
- Stewart Canyon Road
- Old 395
- Pala Mesa Drive
- SR-76
- Intersection improvements at the following locations: Horse Ranch Creek and SR-76, Pankey Road and SR-76, I-15 and SR-76 interchange, SR-76 and Old Highway 395, Pala Mesa Drive and Old Highway 395, Stewart Canyon Road and Old Highway 395, Reche Road and Old Highway 395, Mission Avenue and Old Highway 395.
- Sewer force main to SR-76 from the proposed sewer lift station location on Pankey Road to existing Rainbow Municipal Water District force main and gravity line east and west of I-15.
- Wastewater treatment plant and associated collection and distribution lines, percolation ponds and access roads.
- Water and reclaimed water facilities including reservoirs, transmission lines and associated access roads
- Water distribution lines from the reservoirs to each project being served.
- Water distribution lines from the aqueduct to the reservoirs, including staging for the aqueduct connection.

It is anticipated that offsite improvements will impact approximately 40-50 acres of natural vegetation (Table 4). Precise engineering studies to determine exact facility locations have not been completed so a precise calculation of impacts cannot be determined at this time. However, it is anticipated that impacts will affect willow scrub, willow forest, oak woodland, freshwater marsh, coastal sage scrub, chaparral and non-native grassland.

It must be noted that impacts associated with construction of all of these facilities will occur over time as the various projects in this area are constructed. It is highly unlikely that a single project will be responsible for all facilities. As such, mitigation will be provided at the time each offsite facility or portion thereof is approved. Mitigation will be provided in accordance with the ratios and requirements included in the BMO. The project proponent may provide the mitigation land onsite if enough land within the proposed North County preserve exists within his ownership to meet all project mitigation obligations. Similarly, the necessary mitigation land may be provided off site in a suitable located within the PAMA if sufficient land does not exist on site.

1. Siting Criteria for Off-site Facilities. Where feasible, distribution and collection lines will be located in existing roads, dirt roads and trails. If not feasible, then the most direct route with the least disturbance will be chosen. Impacts to Covered plants will be avoided to the maximum feasible extent given engineering constraints. If avoidance is not feasible, then measures will be taken to relocate the covered species.

2. Facilities are allowed within the North County preserve or PAMA as shown on Figure 1. These locations are conceptual and should be expected to vary from the location shown. All facilities within the North County preserve were sited to minimize impacts to Covered species and sensitive locations. Additional studies related to minimization of impacts are not necessary.

3. Various measures will be taken to minimize construction impacts. These include staking of resources, use of silt fences and other drainage control measures, location of construction staging areas outside of the North County preserve and the use of monitors during construction. These will be analyzed in a project EIR and specified for each facility through project conditions of approval when it is proposed.

Table 4. Estimated Offsite Impacts for Public Facilities for Campus Park, Campus Park West, and Meadowood Projects. [numbers subject to change – rough estimates only]

Vegetation community	Estimated Impact (Acres)	Potential Range (Acres)
Chaparral	2.5	0 - 5
Coastal Sage Scrub	6.0	5 - 7
Marsh	0.8	0.6 - 1.0
Non-native Grassland	21.5	20 - 23
Oak Woodland	0.8	0.5 - 1.0
Riparian Forest	5.5	5 - 6
Riparian Scrub	0.8	0.6 - 1.0
NATURAL HABITATS SUBTOTAL	*37.9*	*31.7 - 44*
Agricultural Land	12.5	12 - 13
Developed/Disturbed Land	1.3	1.0 - 1.6
GRAND TOTAL	***51.7***	***43.7 - 58.6***

Cielo del Norte

The Cielo del Norte project is located near the Elfin Forest area just west of the San Dieguito Reservoir on 468 acres. This project is a residential development with associated on-site open space and trails. Past planning actions for this project have included a tentative map (TM 5182), General Plan Amendment (GPA 01-02), and Specific Plan (SP 99-001). A Final EIR (SCH# 2000031025) for this project was certified by the County in December 2003. The project was later modified to exclude the middle parcels so acreages reported here are based on CEQA Guidelines Section 15091 Findings Regarding Significant Effects of the Modified Project Alternative dated December 3, 2003. This project identifies 348 acres for open space and 177 acres for development, shown in Figure 2. The project on this site includes residential uses, on-site trails and open space, an off-site water tank and two pump stations.

The project site is in the Escondido Creek Valley on mostly rugged terrain ranging from 300 feet to 847 feet above mean sea level. There are several prominent knolls on the property and the majority of the site consists of slopes greater than 15 percent. The site is mainly composed of the following vegetation types: coastal sage scrub (51%), southern mixed chaparral (21%), and coast live oak woodland (9%). The main natural features and resources on the site include Escondido Creek on the north and scrub-covered hills over the rest of the property. A summary of habitat impacts and mitigation measures is provided in Table 5.

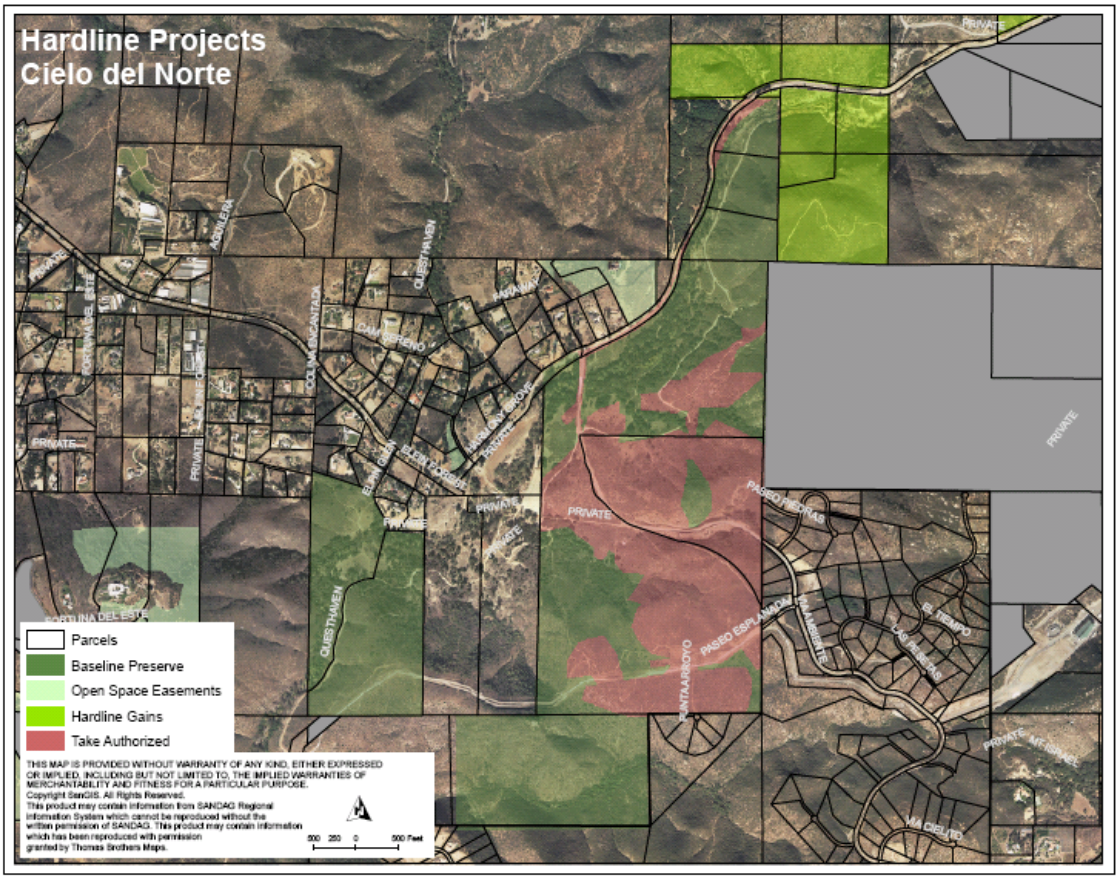
Impacts to natural lands will be mitigated by: dedication of 273 acres of on-site open space; conservation of 72.2 acres of off-site coastal sage scrub in the North Valley Ecoregion supporting an equal number of coastal California gnatcatcher pairs as directly taken; revegetated 8.4 acres of waterline impacts; provide a Habitat Management for conserved lands; off-site conservation of 3.0 acres of Valley needlegrass grassland; enhancement of 1.64 acres of southern willow scrub; creation 0.82 acres of wetland; and other specific conditions detailed in the Final EIR and conditions of approval. Open space is currently planned to be managed by The Escondido Creek Conservancy. Impacts to sensitive species include: Palmer's sagewort (*Artemesia palmeri*); Orcutt's Brodiaea (*Brodiaea orcuttii*); and wart-stemmed ceanothus (*Ceanothus verrucosus*). Impacts to sensitive animal species include: coastal California gnatcatcher, rufous-crowned sparrow, San Diego horned lizard, western whiptail, and several species which generally are expected to occur, but were not necessarily observed on-site. Impacts to sensitive plant and animal species will be mitigated by previously described mitigation measures.

Table 5. Summary of vegetation calculations for Cielo del Norte.

Vegetation community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	13.6	0.0	88.9	86.7%
Coastal Sage Scrub	128.7	0.0	191.4	59.8%
Marsh	0.5	0.0	1.9	79.2%
Native Grassland	4.0	0.0	12.0	75.0%
Oak Woodland	6.6	0.0	37.9	85.2%
Riparian Scrub	0.3	0.0	16.2	98.1%
NATURAL HABITATS SUBTOTAL	*153.7*	*0.0*	*348.3*	*69.4%*
Eucalyptus Woodland	2.0	10.9	0.0	0.0%
Developed/Disturbed Land	21.0	7.0	0.0	0.0%
GRAND TOTAL	***176.7***	***17.9***	***348.3***	***64.2%***

Note: Mitigation reported above includes off-site preservation of 72.2 acres of coastal sage scrub, 3 acres of native grassland. In addition to those numbers reported above the following requirements also apply: 0.5 acres of marsh creation; 0.32 acres of riparian creation; enhance 1.64 acres of southern willow scrub; and other specific conditions detailed in the Final EIR and conditions of approval. Impacts include acreages for Harmony Grove Road Irrevocable Offer of Dedication. Note: Riparian scrub also includes disturbed wetlands and unvegetated channel.

Figure 2. Proposed hardline development plan for Cielo del Norte.



Paradigm Development

The Paradigm Development project is located in the northern part of the County, in the Hidden Meadows community north of the City of Escondido on 359 acres. Specifically, the site is located north of Cerveza Drive and east of Mountain Meadow Road.

The proposed project consists of subdivided residential use, which includes 6 existing homes. Past planning actions for the site include building permits for the existing homes and construction of Vista Montanoso east of Mountain Meadow Road. A General Plan Amendment (GPA) Plan Amendment Authorization (PAA) was submitted on February 21, 2006 (PAA 06-004).

The site is generally flat in the southwest but slopes increase in the north and east plunging down into Moosa Creek Canyon. Existing on-site elevations range from approximately 830 feet above mean sea level where Moosa Canyon Creek leaves the site in the north, to 1,580 feet above mean sea level in the developed southwest portion of the site. The property crosses Moosa Canyon Creek in the north and northeast and is fed by numerous smaller drainages that support riparian habitat. Moosa Canyon Creek flows northwest to Gopher Canyon Creek and ultimately drains into the San Luis Rey River. Past uses of the property include avocado production concentrated in the southwest. Portions of the groves have been developed for single-family homes.

The site supports 11 vegetation communities: southern coast live oak riparian forest, coast live oak woodland, southern cottonwood willow riparian forest, southern willow scrub, riparian scrub, southern mixed chaparral (including disturbed), annual grassland, eucalyptus woodland, orchard, disturbed habitat, and developed land. Moosa Canyon Creek provides a connection from the Daley Ranch in the City of Escondido to a large area of undeveloped land in Rancho Guejito to the San Luis Rey River Valley, and thus represents a major wildlife corridor in north San Diego County. In addition, the northern portion of the site is within the County's Moosa Creek Resource Conservation Areas (RCA). This project will cause the permanent protection of open space along Moosa Creek under its ownership.

No sensitive plant species have been observed on-site and few, if any, are expected to occur on-site. Three sensitive animal species have been observed/detected on-site: red-shouldered hawk (*Buteo lineatus*), turkey vulture (*Cathartes aura*), and San Diego horned lizard (*Phrynosoma coronatum blainvillei*).

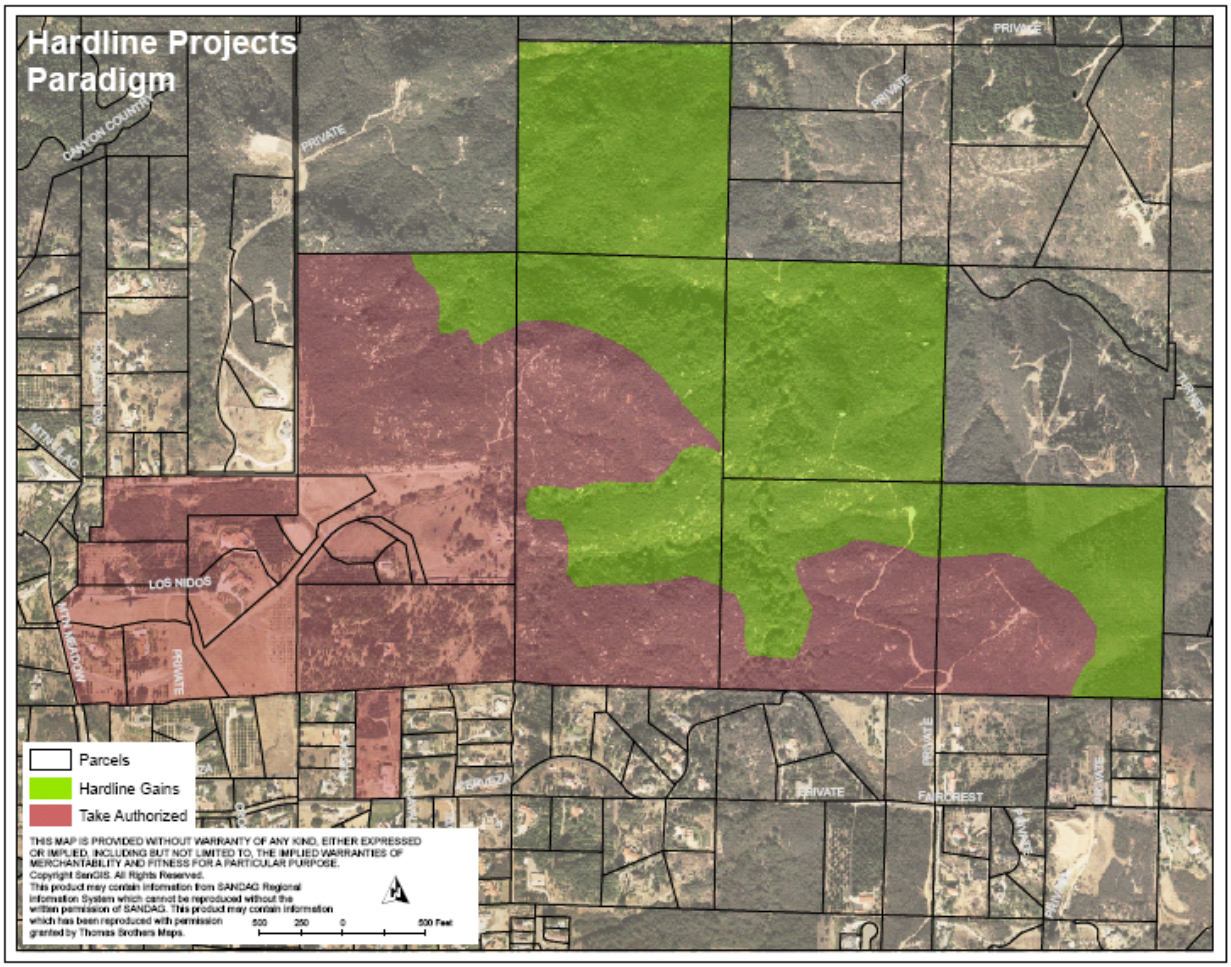
Approximately 161 acres have been identified for open space and 198 acres have been identified for development (Figure 3). Much of the development is proposed in areas outside of PAMA in areas that have been disturbed by past agricultural uses. Multiple project design concepts are presently being developed including an alternative that concentrates the allowable density into smaller development envelopes. If such an alternative proves to be viable to the developer and acceptable to County staff, the area identified for open space may be increased by as much as 35 acres. A summary of impacts to vegetation communities and proposed open space is provided in Table 6. No specific conditions have been set for the proposed project as no application has been made for subdivision. Any project will be required to conform to all appropriate County, State and federal ordinances, codes, and laws.

Table 6. Summary of vegetation calculations for Paradigm Development.

Vegetation community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	122.2	0.0	149.1	55.0%
Non-native Grassland	25.4	0.0	0.0	0.0%
Oak Woodland	1.0	0.0	0.9	47.4%
Riparian Woodland	1.4	0.0	10.6	88.3%
NATURAL HABITATS SUBTOTAL	*150.0*	*0.0*	*160.6*	*51.7%*
Eucalyptus Woodland	0.9	0.0	0.0	0.0%
Agricultural Land	28.3	0.0	0.0	0.0%
Developed/Disturbed Land	18.6	0.3	0.0	0.0%
GRAND TOTAL	***197.8***	***0.3***	***160.6***	***44.8%***

Note: all riparian habitats for this project are consolidated into the Riparian Woodland category.

Figure 3. Development footprint for Paradigm Development project.



Lilac Ranch

The Lilac Ranch project is located in the northern part of the County in the unincorporated community of Valley Center, approximately 11 miles north of the City of Escondido. The project site is located approximately 5 miles northwest of the Valley Center town center, approximately 1.5 miles east of Interstate 15 (I-15) and 5 miles south of SR-76 and the San Luis Rey River. West Lilac Road is located immediately west of the project site and Lilac Road crosses the project site just south of its intersection with Couser Canyon Road.

The project area encompasses approximately 949 acres that are proposed for development (including open space components) as part of the current Lilac Ranch General Plan Amendment/Specific Plan (Figure 4).

Under the Specific Plan/General Plan Amendment, the proposed project includes residential units, a Village Center, a fire station/sheriff's annex, a wastewater treatment plant, 5 wastewater treatment ponds/fields facility that may be used by the Valley Center Municipal Water District for wet-weather storage and/or leach fields and 629.6 acres of natural and planned open space. See Table 7 for a further breakdown of vegetation communities proposed to be impacted and conserved.

The project area is characterized by a broad, east-west trending river valley. The north side of the valley is formed by gently rolling hillsides; the south side of the valley is formed by steeper slopes and north-south trending drainages. Elevations within the project area varies from approximately 620 feet above mean sea level within Lilac Valley and its stream courses to approximately 950 feet above mean sea level on the northern and southern hillsides. No major ridgelines exist within the project area.

The site supports 17 vegetation communities: southern cottonwood willow riparian forest, southern coast live oak riparian forest, southern willow scrub, fresh water marsh, disturbed wetland, streambed, coast live oak woodland, Diegan coastal sage scrub, coastal sage-chaparral scrub, flat-topped buckwheat scrub, scrub oak chaparral, southern mixed chaparral, non-native grassland, non-native vegetation, agriculture, disturbed habitat and developed land.

A central design feature of the project is the preservation of substantial portions of open space including environmentally and culturally sensitive land covering approximately 66.4 percent (629.8 acres) of the project area. The network includes approximately 58.6 percent (555.8 acres) of Conservation Open Space intended to be dedicated under the guidance of the Plan. A major open space feature within the Conservation Open Space is the Keys Creek Corridor, which consists of approximately 300 acres, excluding major tributaries. The width of this corridor varies on site from approximately 450 feet at the existing Ranch House site to 1,250 feet or more within the project area. Another major feature of the Conservation Open Space are the two major north-south trending corridors located primarily along the western end of the Main Ranch and between Planning Areas 4, 5 and 6. These north-south trending open space corridors and the Keys Creek Corridor also incorporate the preservation of large portions of the site's Diegan coastal sage scrub and mixed-chaparral habitat located on the north and south slopes of the project area.

The project outlines several uses within the site's planned open space. A detailed list of these permitted uses in the Open Space designated areas are provided below.

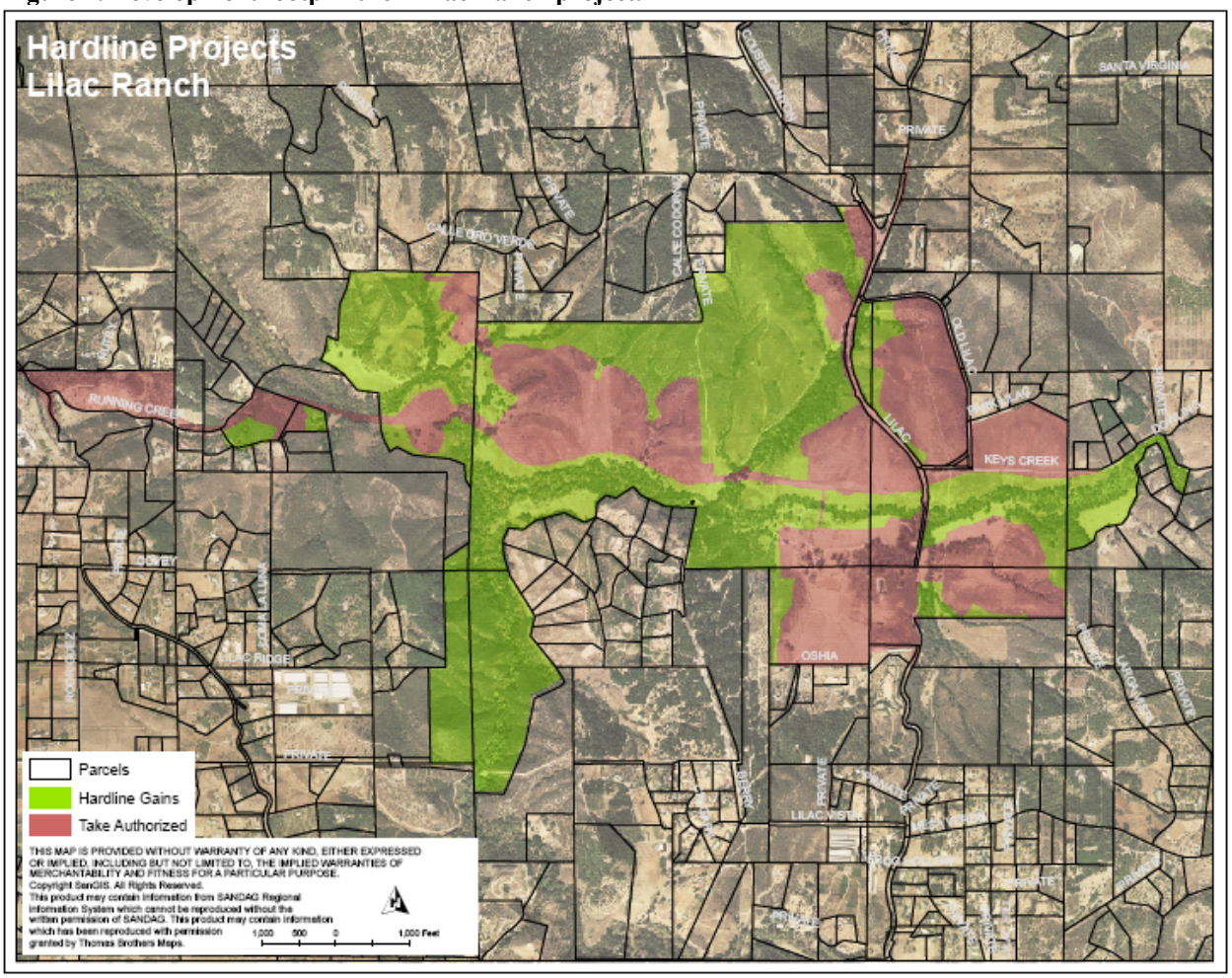
1. Habitat conservation, maintenance, monitoring and restoration projects.
2. Passive recreation subject to specific limitations imposed by the County, resource agencies, HOA, or other management entity.
3. Grazing (or other methods) to maintain grasslands for raptor foraging.
4. Trails (pedestrian and equestrian) according to project open space and multi-use trails plan. Motorized vehicles would not be allowed.
5. Small passive parks, picnic areas, interpretive kiosks/signs, and rest stops along the proposed trail system.
6. Public utility systems and infrastructure including but not limited to gas, water, sewer, drainage, electric, cable, maintenance roads, the chlorination plant, and emergency access roads.
7. Public and private (local) roads as shown in the Project's circulation plan.
8. Fencing to provide protection of biological preserve areas and cultural resources.
9. Architectural features and monuments.

Table 7. Summary of vegetation calculations for Lilac Ranch.

Vegetation Community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	15.7	0.0	110.8	87.6%
Coastal Sage Scrub	66.8	0.0	99.9	59.9%
Coastal Sage Scrub/Chaparral	4.8	0.0	2.0	29.4%
Marsh	0.0	0.0	0.6	100.0%
Non-native Grassland	243.5	0.0	166.6	40.6%
Oak Woodland	7.5	0.0	38.9	83.8%
Open Water	0.3	0.0	0.3	47.4%
Riparian Forest	8.4	0.0	114.9	93.2%
Riparian Scrub	0.1	0.0	3.1	97.2%
NATURAL HABITATS SUBTOTAL	*347.1*	*0.0*	*537.0*	*60.7%*
Agricultural Land	53.4	0.0	9.5	15.1%
Developed/Disturbed Land	19.9	0.0	4.2	17.4%
GRAND TOTAL	***420.4***	***0.0***	***550.7***	***56.7%***

Notes: Development impacts include off-site impacts (19.8 acres), but do not include impacts to oak root zone (5.8 ac). Allowed storm drain impacts (0.8 ac) are included in open space, not as development impacts.

Figure 4. Development footprint for Lilac Ranch project.



Merriam Mountains

The Merriam Mountains project area consists of approximately 2,327 acres located within the Merriam Mountains in an unincorporated portion of the northern part of the County. The site is bounded by I-15 on the east, Deer Springs Road (S12) on the south, and Twin Oaks Valley Road on the west, with a small portion of the western edge of the site traversed by Twin Oaks Valley Road, and the northeast corner of the site traversed by Lawrence Welk Drive. Gopher Canyon Road is located approximately one mile north of the site. The cities of Escondido and San Marcos are approximately one mile south of the site.

The project site lies within the central portion of the Merriam Mountains, a narrow chain of mountains generally running north and south with a variety of east-west trending ridgelines and scattered peaks. Land uses surrounding the site include large-lot single-family residences and avocado groves to the north, west and south. I-15 is located to the east.

The undeveloped site contains natural features of scenic and biological value including rugged topography and rock outcroppings. Elevations on the site range from about 850 feet above mean sea level near the intersection of Deer Springs Road to about 1,650 above mean sea level in the north-central portion of the site. The dominant vegetation community on the site is Southern Mixed Chaparral. Runoff from the project site flows either west to the south fork of Gopher Canyon, east to the South Fork of Moosa Canyon or southerly to San Marcos Creek.

The site is currently undeveloped and is crisscrossed by a number of dirt roads and trails that provide access to each existing legal parcel and area associated with an existing water infrastructure system present on the site. Over the years, portions of the project area have been devoted to land uses that have left their mark, including a rock quarry and a private airfield (that was never used).

The project proposes to develop a master planned community integrating residential, commercial, recreational and open space land uses. The project proposes single-family and multi-family residential uses, as well as some commercial uses near the I-15/Deer Springs Road interchange. Proposed developed park uses include community parks as well as local, neighborhood and pocket parks.

Approximately 598 acres of the project site would be graded for development pads and roads (this includes 538 acres of development pads and roads located within the development area, plus 60 acres for secondary access roads located within the biological open space area), and about 1,729 acres would be retained as undeveloped land, with 1,192 acres in biological open space and 537 acres in other common open space (Table 8; Figure 5). The 1,192 acre biological open space will be configured to contribute to North County preserve assembly. Off-site mitigation is also necessary to offset impacts to coastal sage scrub and will consist of conservation of approximately 35 acres.

Table 8. Summary of vegetation calculations for Merriam Mountains.

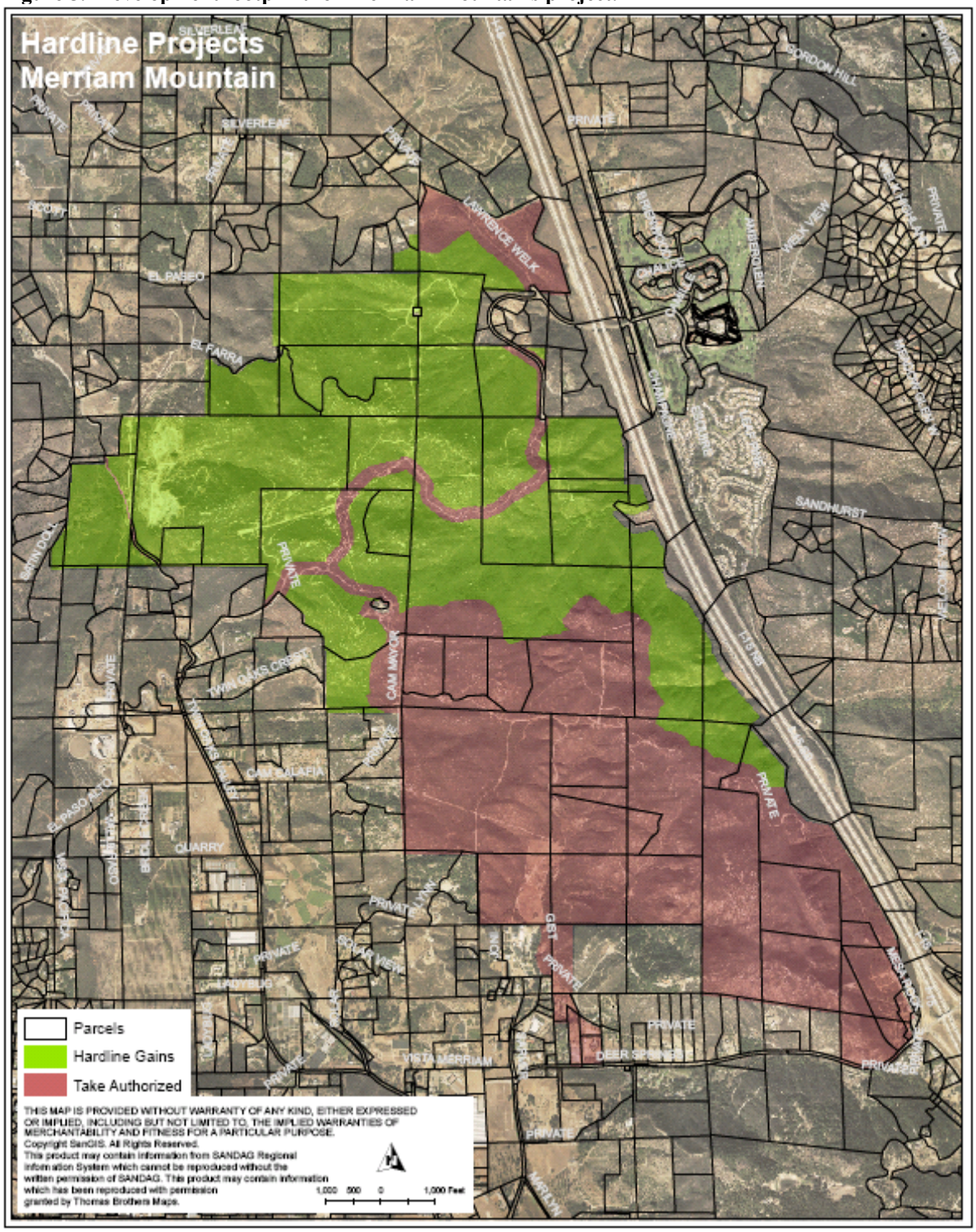
Vegetation community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	538.3	526.7	1149.0	51.9%
Coastal Sage Scrub	19.1	4.0	5.5	19.2%
Marsh	0.0	0.0	0.1	100.0%
Non-native Grassland	17.6	1.9	3.7	15.9%
Oak Woodland	1.2	1.1	1.9	45.2%
Riparian Forest	1.1	0.1	1.1	47.8%
Riparian Scrub	0.5	0.3	2.9	78.4%
Riparian Woodland	0.0	0.0	1.6	100.0%
NATURAL HABITATS SUBTOTAL	*577.8*	*534.1*	*1165.8*	*51.2%*
Eucalyptus Woodland	1.5	0.0	0.0	0.0%
Agricultural Land	5.2	1.3	1.0	13.3%
Developed/Disturbed Land	14.6	0.6	25.2	62.4%
GRAND TOTAL	***599.1***	***536.0***	***1192.0***	***51.2%***

The impact area does not include off-site impacts for Meadow Park Lane which includes: 0.9 acres of disturbed habitat; 1.2 acres of Diegan Coastal Sage Scrub; 12.9 acres of Southern Mixed Chaparral; 1.3 acres of Urban Development; 0.1 acres of Scrub Oak Woodland, 0.1 acres of Southern Coast Live Oak Riparian Forest and 0.2 acres of Eucalyptus Woodland.

On-site Secondary Access Roads consist of Lawrence Welk Court and Camino Mayor. These are included in the "development impact" category; impacts include 0.4 acres coastal sage scrub, 59.3 acres of chaparral, 0.2 acres oak woodland, and 0.1 acres eucalyptus woodland

Other Open Space totals include impacts to proposed sewer easement which include: 1.2 acres of southern mixed chaparral.

Figure 5. Development footprint for Merriam Mountains project.



Montecito Ranch (*A final decision for inclusion of this project has not been reached*)

The 935.2-acre Montecito Ranch project is located approximately one mile northwest of the Ramona Town Center within the Ramona Community Planning Area. Approximately 555.1 acres have been identified for open space and approximately 406.7 acres have been identified for development. Approximately 220.5 acres of the total property have already been set aside as mitigation for other actions and are included in the project statistics cited here. Major planning goals for Montecito Ranch include the provision of new homes on lots of varying sizes in keeping with Ramona's rural environment, retention of significant landforms, and preservation of the majority of the property as open space.

Most of the property has been used for grazing and other ranching activities for over a century. The historic Montecito Ranch House is located in the southwestern portion of the property and is being preserved. Two valleys characterize Montecito Ranch, one in the western portion of the site and one in the east-central portion of the site. These are further defined by three distinct knolls. Steep slopes are found in the northern and northwestern portion of the site, adjacent to Clevenger Canyon.

Montecito Ranch has been surveyed and the existing biological resources mapped. The majority of the site supports coastal sage scrub, chaparral and annual grassland with smaller amounts of Engelmann oak woodland and riparian forest. A summary of the impacts is provided in Table 9 and a map of the proposed development footprint and open space in Figure 6. Focused surveys were conducted for sensitive plants, California gnatcatcher, Stephens' kangaroo rat, San Diego fairy shrimp, Riverside fairy shrimp, Arroyo toad, and Quino checkerspot butterfly. Additional surveys were conducted in off-site areas that will be affected by road and public facility construction. Sensitive plants found on site include Engelmann oak and southern tarplant. Sensitive animal species found on site include coastal western whiptail, San Diego horned lizard, two-striped garter snake, California gnatcatcher (approximately 5 pairs), and Southern California rufous-crowned sparrow.

The project includes the provision of associated streets, public infrastructure including a wastewater treatment facility with storage ponds and spray disposal area, school, water reservoir and access road, parks and an extensive trail system. Vegetation fuel management is included within the development area shown in Figure 6. The historic ranch house, equestrian staging area, wastewater treatment plant and storage ponds, public park and charter high school site are not included within the preserve. The spray field is on a currently disturbed site and is included within the preserve as an allowed use. Montecito Ranch will contribute approximately 555.1 on-site acres to the North County preserve. Montecito Ranch will make valuable contributions to the Plan through the preservation of large blocks of coastal sage scrub, chaparral and non-native grasslands. The preserved areas are contiguous with planned conservation areas that are part of the Ramona Grasslands and Clevenger Canyon.

It is necessary to specify certain uses that may occur within the North County preserve area. These uses do not include Montecito Ranch Road through the property, the footprint of which is not included in the North County preserve area. Uses allowed within the North County preserve areas in Montecito Ranch are limited and specific, and consist of the following:

- Revegetation of disturbed areas within the North County preserve as might be undertaken or permitted by state, federal and local agencies in accordance with the County's Take permits. This activity is in addition to any that might be undertaken as mitigation requirements by the developer of Montecito Ranch.
- Installation of waterlines, sewer lines and other utilities or access roads required to service the Montecito Ranch subdivision within the previously preserved area.
- Construction, operation and management of the offsite water reservoir and access road.
- Operation and management of the treated wastewater spray field. Uses allowed in this area include the installation, operation and maintenance of a spray irrigation system and other activities to ensure the proper use and disposal of the treated wastewater.
- Maintenance of the waterlines, roads, drainage facilities, sewer pump stations and other public facilities should it be necessary to ensure proper operation. None of these facilities are located in the preserve, but repairs and maintenance could necessitate some disturbance. Revegetation of any areas disturbed by allowed maintenance and/or repair activities to a pre-disturbance condition in accordance with a revegetation plan prepared by a qualified biologist. The entity causing the disturbance will be responsible for the revegetation, and will submit as-built construction and revegetation plans to the owner of the preserve land upon completion of work.
- Construction, repair and maintenance of trails as shown on the Montecito Ranch Project

Various off-site facilities will be constructed to provide a necessary and adequate level of public services for the residents of Montecito Ranch. These facilities are mapped and discussed in the project EIR and may be refined and/or modified as engineering studies proceed. These include the following:

- Widening and improvements to Ash Street from Montecito Ranch Road east to SR-78 (Pine Street), including water, sewer and other utilities within the road right-of-way and slopes adjacent to the right-of-way.
- Project Off-site Roadway Scenario: Widening and improvements to Montecito Way from the project boundary south to Montecito Road, and Montecito Road (SA 990) from Montecito Way east to SR-67 (Main Street), including water, sewer and other utilities within the road right-of-way and slopes adjacent to the road right-of-way.
- Improvement to the following intersections:
- SR-67 and SR-78
- Montecito Road and SR-67
- Montecito Way and Montecito Road
- Ash Street and SR-78
- SR-78 and Olive Street
- SR-67 and Highland Valley Road
- SR-67 and Archie Moore Road

It is anticipated that project development and off-site road improvements will impact approximately 406.7 acres, with roughly 380.1 acres being located onsite. The remainder is due to off-site facilities. Impacts and preservation are summarized in Table 9.

It is possible that all mitigation requirements will not be satisfied on-site. Under such circumstances, mitigation will consist of dedication of the appropriate amount of land consistent with the BMO. The location of off-site mitigation, if necessary, will be within PAMA or within a wetland with the appropriate vegetation. Off-site mitigation is currently estimated to be required for approximately 21 acres of non-native grassland.

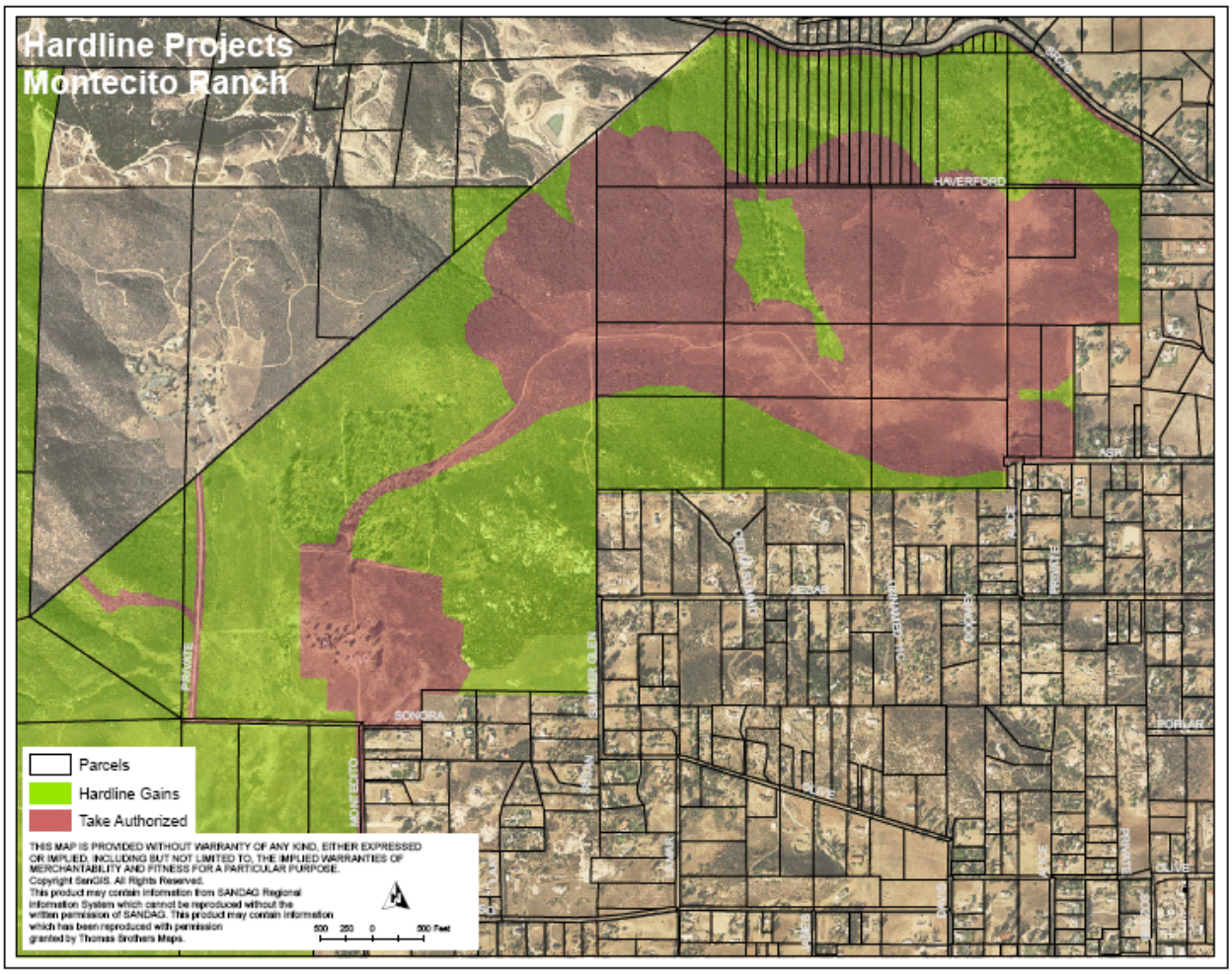
Additional mitigation measures include: protection of open space areas during construction, seasonal limitations when grading can occur, annual monitoring of certain species, trash and invasive species removal from open space, creation/restoration of certain wetland habitats, protection of vernal pools near the construction site of off-site roads. These are defined in the project EIR.

Table 9. Summary of vegetation calculations for Montecito Ranch.

Vegetation community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	134.8	0.0	119.5	47.0%
Coastal Sage Scrub	69.3	0.0	249.6	78.3%
Engelmann Oak Woodland	1.3	0.0	30.9	95.9%
Non-native Grassland	26.9	0.0	23.1	46.2%
Open Water	0.0	0.0	0.7	100.0%
Riparian Forest	0.0	0.0	10.6	100.0%
Riparian Scrub	0.0	0.0	0.3	100.0%
NATURAL HABITATS SUBTOTAL	*232.3*	*0.0*	*434.7*	*65.2%*
Eucalyptus Woodland	0.1	0.0	2.4	96.0%
Agricultural Land	134.4	0.0	112.5	45.6%
Developed/Disturbed Land	13.3	0.0	5.3	28.5%
GRAND TOTAL	***380.1***	***0.0***	***554.9***	***59.3%***

Note: Totals above include 220 acres of open space set aside prior to project mitigation per a previous agreement with the County for past actions.

Figure 6. Development footprint for Montecito Ranch project.



Warner Ranch (*A final decision for inclusion of this project has not been reached*)

The Warner Ranch (GPA 06-009, SPA 06-002, TM 5508) project is located in the unincorporated community of Pala, north of State Route 76 on 510 acres. The major planning goals for this project have been to provide a planned community with residential, recreational, and open space uses. Past planning actions for this project have included approval of Plan Amendment Authorization (PAA), authorizing a General Plan Amendment Initiation. Approximately 347 acres have been identified for open space and 163 have been identified for development. The proposed project on this site includes mixed residential units, public and private parks, and preserved open space.

The terrain on the site is characterized by relatively flat and rolling hills in the south and steeper slopes and canyons in the north. The site is mainly composed of the following vegetation types: chaparral (southern mixed and scrub oak), coastal sage scrub, coast live oak woodland, valley needlegrass (native) grassland, annual (non-native) grassland, riparian scrub (mule fat), riparian forest (southern sycamore, cottonwood), and riparian woodland (sycamore alluvial). The main natural features and resources on the site include a major segment of Gomez Canyon Creek and a minor segment of Pala Creek. Natural features or resources proposed to be impacted include coastal sage scrub and non-native grassland mainly located in the southeastern portion of the project site. Past uses of this property have included equestrian housing and orchards. A summary of habitat impacts and mitigation measures is provided in Table 10. Impacts to natural lands will be mitigated by conservation of onsite open space. The proposed development footprint for this project, including improvements to SR-76, is shown in Figure 7.

Open space conserved as part of the project will be managed and restricted from uses in accordance with MSCP. The project area was surveyed, according to federal protocols, for arroyo toad, least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, and spring and summer rare plants. Each of the surveys was negative indicating that state- and federally-listed species are absent from the project site. Surveys for Quino checkerspot butterfly were not completed according to the federal protocol and therefore will be redone in order to determine presence/absence of that species. Based on these results, no specific species mitigation is proposed for the project. The project will adhere to the Migratory Bird Treaty Act, state and federal wetlands regulations, including construction and long-term project storm water discharge restrictions, and North County Preserve Land Use Adjacency Guidelines, such as limiting noise, lighting, brush management, access route, etc. within the Preserve.

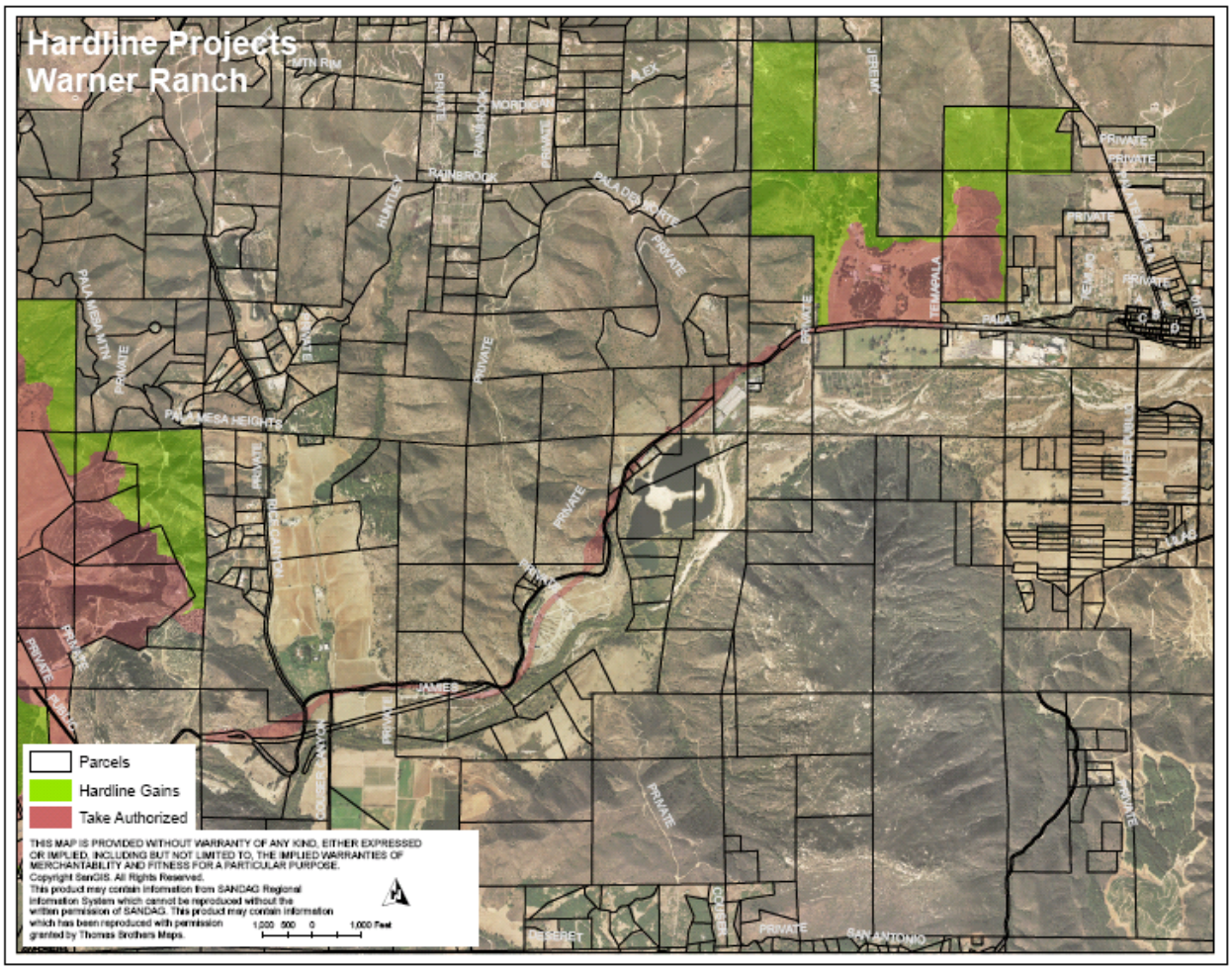
The project will also require offsite improvements, most notably, expansion of State Route 76 between Rice Canyon and the project site. Impacts for the project component have not yet been quantified for the currently planned design. Biological surveys of the alignment area have been conducted by consultants under contract with Caltrans.

Table 10. Summary of vegetation calculations for Warner Ranch.

Vegetation Community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	5.8	0.0	135.8	95.9%
Coastal Sage Scrub	80.8	2.2	135.7	62.0%
Marsh	0.0	0.2	0.0	0.0%
Native Grassland	0.0	0.0	1.2	100.0%
Non-native Grassland	38.6	0.0	8.3	17.7%
Oak Woodland	0.3	0.0	0.7	70.0%
Open Water	0.1	0.2	0.0	0.0%
Riparian Forest	0.6	2.1	17.7	86.8%
Riparian Scrub	0.0	0.0	1.2	100.0%
Riparian Woodland	1.0	0.0	4.4	81.5%
NATURAL HABITATS SUBTOTAL	*127.2*	*4.7*	*305.0*	*69.8%*
Agricultural Land	77.3	2.1	36.5	31.5%
Developed/Disturbed Land	38.5	4.4	3.0	6.5%
GRAND TOTAL	***243.0***	***11.2***	***344.5***	***57.5%***

Note: Impact estimates above include 76.3 acres of estimated impacts for improvements to SR-76 and 11.2 acres of other open space from the proposed abandonment of a portion of the current right-of-way for SR-76.

Figure 7. Development footprint for Warner Ranch project.



Note: Project includes improvements to Highway 76, shown on the map. The hardline project shown on the west end of the map above is Campus Park and Meadowood, which are separate from the Warner Ranch project.

Public Hardline Projects

McClellan-Palomar Airport

The McClellan-Palomar Airport is located in the City of Carlsbad just north of Palomar Airport Road and is comprised of two properties separated by El Camino Real (Figure 8). The western property is 250 acres and contains the runway, hangars, parking lot, and other airport development. There are also approximately six acres of coastal sage scrub, six acres of disturbed coastal sage scrub, one acre of annual grassland, and traces of freshwater seep, chamise chaparral, and native grassland. There are also several vernal pools identified off of the northwest end of the current runway; however, protocol surveys have been negative for listed species. The western bank, just northwest of the runway, is within the identified PAMA and consists of coastal sage scrub, disturbed areas, and traces of native grasslands and freshwater seep. All other areas are outside PAMA, including the areas where the vernal pools occur.

The eastern property is 211 acres and contains office buildings and aircraft navigational aids, but is largely natural habitat. Dominant vegetation communities on this site include coastal sage scrub, coast live oak forest, southern maritime chaparral, and southern mixed chaparral. There are also about 20 acres of agricultural land on the southeast end of this property. This property supports a population of San Diego thornmint (*Acanthomintha ilicifolia*). Much of northern portion of this property is preserved as the Tchang Open Space Preserve and is reflected as being preserved on Plan maps. Approximately 37 acres of the southern portion of the property is reflected as being preserved on the Plan maps. Mitigation preservation credits will be tracked on these 37 acres and the 37 acres will appear as "Environmentally Sensitive Area" (ESA) on future airport layout plans and master plans. The rest of the property is within PAMA.

In order to maintain its function as a regional airport and respond to future aircraft needs and FAA regulations, there are several airport expansion projects currently being planned that will affect natural lands on both properties described above. Future impacts to habitat or listed species (if any), will be addressed through future environmental review and by demonstrating conformance to this Plan.

A summary of anticipated projects being planned for the airport property may include but are not limited to:

- Clean closure of Landfill Units 2 and 3 and extension of Runway 24 approximately 1,000 feet toward the east over currently disturbed land.
- Modernized County/Commuter Airlines parking ramp on currently developed area.
- Construction of Palomar Airport Industrial Park east of El Camino Real. This is conceptually being planned mainly within the areas now in agriculture, but will also likely have minor impacts to the natural vegetation (i.e., eucalyptus woodland) as well.

Take-authorized projects on this property include the following:

1. Modernized north side Parking Ramp, Apron and Taxiway which will likely impact natural upland habitats listed above, including vernal pools.

The north-side aircraft parking ramp, apron, and taxiway will consist of approximately 12 acres of new pavement and cleared vegetation. Table 11 below describes how impacts to native vegetation communities will be mitigated.

Table 11. Mitigation for impacts for McClellan-Palomar Airport runway expansion.

Impact type	Impact acreage (approximate)	Proposed mitigation ratio	Mitigation acreage	Mitigation type
Coastal Sage Scrub	3	1.5	**4.5**	Preserve 3 acres of CSS onsite, purchase 1.5 acres of CSS credit at San Marcos Landfill
Disturbed Coastal Sage Scrub	6	1	**6**	Purchase 6 acres of CSS credit at San Marcos Landfill
Chamise Chaparral	0.4	0.5	**0.2**	Preserve 0.2 acres of Southern Maritime Chaparral on airport property east of El Camino Real
Native grassland	0.15	1	**0.15**	Create 0.15 acres of native grassland
Non-native grassland	1.1	1	**1.1**	Preserve 1.1 acres of Non-native grassland on airport property east of El Camino Real
Vernal pools	0.26	2	**0.52**	Restore .52 acres of vernal pools on state parks property located in Carlsbad.
Total	**10.91**		**12.47**	

2. Construction of Palomar Airport Industrial Park east of El Camino Real.

The construction of the proposed industrial park would occur within current agricultural lands. Approximately 0.25 acres of Southern Maritime Chaparral may be impacted by this project. Southern Maritime Chaparral would be preserved onsite at a 2:1 ratio, for a total of 0.50 acres to mitigate impacts from the proposed Industrial Park project.

3. Extension of Runway 6-24 east to El Camino Real including upgrade of navigational aids the on property east of El Camino Real.

The upgrade of navigational aids would have the potential to impact San Diego thornmint. Impacts to this plant species would be consistent with the Narrow Endemics guidelines, in that 80% of the total population onsite would be preserved. This project would also potentially impact Southern Maritime Chaparral. At the time the project is planned, the impact acreage to Southern Maritime Chaparral would be calculated and a mitigation ratio consistent with lands in PAMA would be assigned. Mitigation would occur through preservation of Southern Maritime Chaparral onsite.

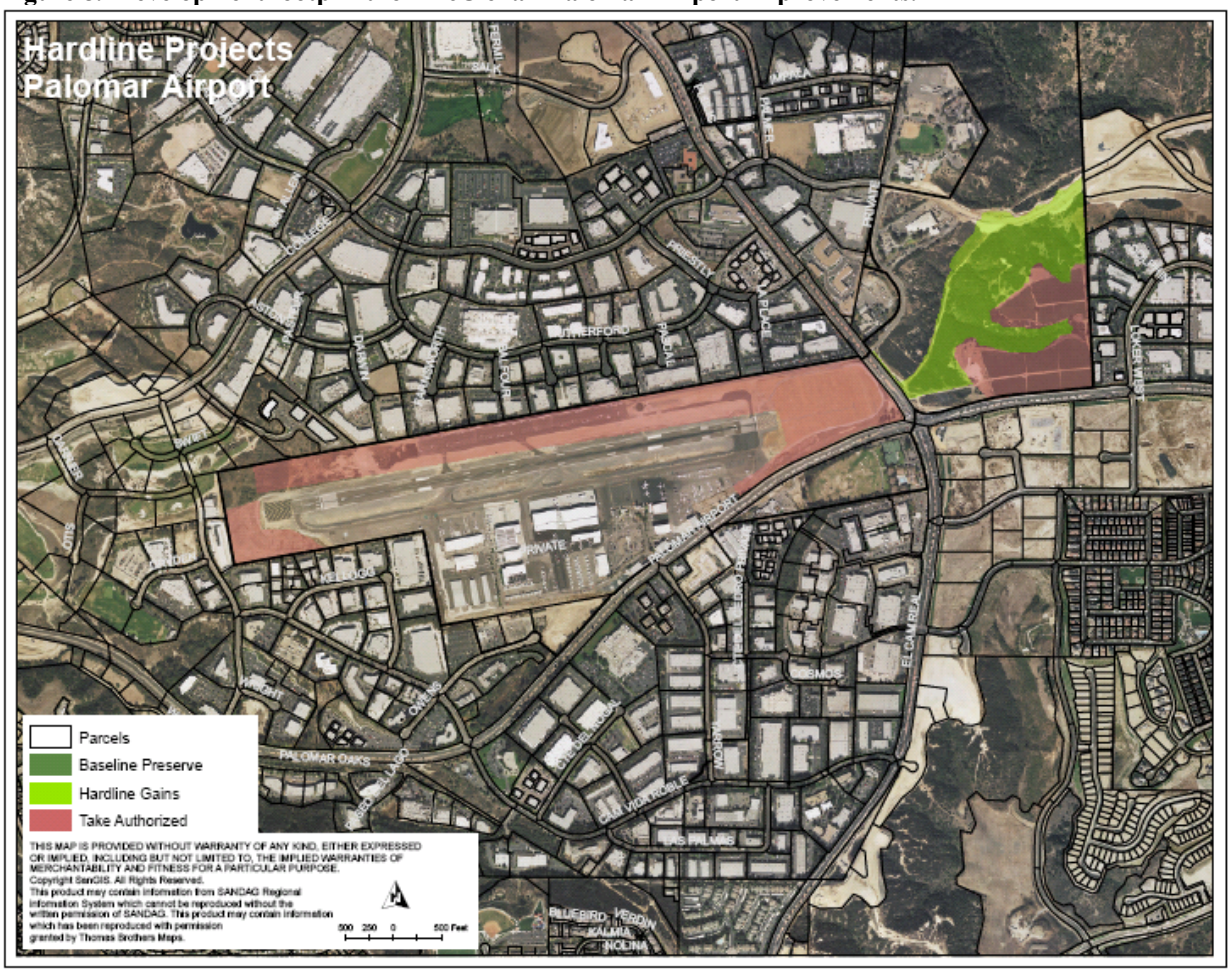
Table 12 provides a summary of all impacts expected as part of these projects. Separate from the airport projects, the City of Carlsbad has constructed an extension of Faraday Avenue through the eastern parcel, which is not reflected in the vegetation maps used for planning. This project was permitted separate from and prior to this Plan.

Table 12. Summary of vegetation calculations for McClellan-Palomar Airport.

Vegetation Community	Development Impact (Acres)	Other Open Space (Acres)	Biological Open Space (Acres)	Percent in Biological Open Space
Chaparral	0.4	0.0	0.0	4.7%
Coastal Sage Scrub	8.8	0.0	3.1	25.8%
Meadow	0.0	0.0	0.1	100.0%
Native Grassland	0.2	0.0	0.0	0.0%
Non-native Grassland	1.1	0.0	2.9	72.3%
Southern Maritime Chaparral	0.3	0.0	37.5	99.3%
NATURAL HABITATS SUBTOTAL	*10.7*	*0.0*	*43.6*	*80.3%*
Eucalyptus Woodland	1.5	0.0	0.0	0.0%
Agricultural Land	23.6	0.0	0.0	0.0%
Developed/Disturbed Land	4.2	0.0	0.8	16.2%
GRAND TOTAL	***40.0***	***0.0***	***44.4***	***52.6%***

Note: Coastal sage scrub impacts include 5.8 acres of disturbed coastal sage scrub.

Figure 8. Development footprint for McClellan-Palomar Airport improvements.



San Marcos Landfill

The San Marcos landfill is located within the jurisdiction of the City of San Marcos. It is comprised of an inactive landfill site, accessory buildings and staging areas, several developed parcels east of the landfill, and undeveloped buffer parcels to the north, east and south of the landfill (Figure 9). The County of San Diego owns this group of properties within the City of San Marcos, which are included within this plan according to an agreement made between the County of San Diego and SANDAG during parallel planning efforts of habitat conservation plans. In the event that properties are sold to other entities, the jurisdiction issuing Incidental Take permits would become the City of San Marcos, assuming its MHCP Subarea Plan has been approved.

Pursuant to an agreement with the City of San Marcos, the inactive landfill area was revegetated with plants indicative of coastal sage scrub and southern mixed chaparral. The details of this revegetation effort are described in the Contract Documents for the San Marcos Closure Revegetation and Irrigation System[1]. There is a high likelihood of the California gnatcatcher being attracted to the revegetated landfill site given the close proximity of occupied habitat. This coastal sage scrub habitat in the surrounding area is important to the survival of California gnatcatcher and the landfill occupies a key location for movement of this species.

There is also a need for the closed landfill to be maintained in such a way as to protect human health and safety and the environment (surface water, groundwater, and air quality) as required by local, state, and federal regulations and permits. Work which may be completed to remain in compliance with Title 27, APCD regulations, and the site Waste Discharge Requirements includes:

- The landfill is currently fenced to discourage unauthorized access. The fencing must be maintained in good condition and repaired or replaced as necessary (27 CCR 20530).

- The landfill top deck and slopes will be graded periodically to ensure proper drainage and prevent ponding (27 CCR 20560, 21140, and 21142). Placement of additional fill material may be required from existing onsite stockpile or imported soil.

- Drainage systems and erosion control must be maintained to protect the integrity of the landfill cover (27 CCR 21150). Activities may include placement of erosion control materials such as gravel bags, fiber rolls, silt fences, matting, tackified straw, and hydroseed. Vegetation may also be mowed or removed and replaced as needed to prevent and repair erosion.

- Integrity of slopes must be maintained (27 CCR 21145). Activities may include grading of over steep, cracked, eroded or otherwise damaged slopes. Placement of additional fill material may be required from existing onsite stockpile or imported soil.

[1] County of San Diego. January 20, 2005 (Bid Opening Date). "Contract Documents for Installation of San Marcos Landfill Closure, Revegetation and Irrigation System, Oracle Project No. 1004970, ARMS Activity No. 310SMV" Bid No.: 7.

- Landfill gas must be controlled to protect human health and the environment (27 CCR 20919.5 and 20921). Monthly monitoring of gas wells and probes is required by Title 27 and APCD regulations. In addition to monitoring, the landfill gas system must be maintained and upgraded as necessary. Gas system activities may include inspections, drilling/construction/destruction of monitoring wells and probes as needed.

The County is required to implement a preventative maintenance program to monitor and promptly repair or correct deteriorated or defective conditions (27 CCR 20750). Activities in addition to those described above may include regular testing of surface water and groundwater, drilling/installing groundwater monitoring wells, and mowing/trimming vegetation for fire protection.

Incidental take of covered species (including California gnatcatcher) on the revegetated landfill site will be permitted for the actions described above. During the initial 5 years of the revegetation project, during plant establishment, no take is expected to occur; therefore activities that alter coastal sage scrub will not require conditional regulations. After the initial revegetation period of 5 years, activities must follow all of the following guidelines to qualify for incidental take of covered species on the landfill site:

a. Disturbance to coastal sage scrub should be limited in extent and duration to the minimum acreage and time needed to accomplish required tasks;

b. Disturbance of coastal sage scrub must not exceed 25% of the landfill area annually where coastal sage scrub is established (the landfill site currently occupies about 100 acres, so the maximum extent of disturbance would be about 25 acres if the entire site was revegetated with coastal sage scrub);

c. At all times 50 percent of the coastal sage must be a minimum of 5 years old. If emergency activities result in less than 50 percent of the coastal sage scrub being 5 years old, routine maintenance that is not essential (i.e., not needed to prevent probable future emergencies, to protect human health and safety and the environment), that may disturb coastal sage scrub must be delayed until at least half of the coastal sage scrub on-site is at least 5 years old. An exception to this will be activities that are necessary to remain in compliance with state or federal regulations or are ordered by a regulatory agency.

Figure 9. San Marcos Landfill.